

TELEPHONIC INTERVIEW SUMMARY

Applicant and its undersigned representative thank the Examiner for the courtesy extended during the telephonic interview on August 14, 2007. The substance of the interview consisted of Applicant's undersigned representative proposing amendment to the specification to overcome the objection thereto, and proposing amendments to claims 5 and 14 to overcome the 35 U.S.C. § 112 rejections. Applicant's undersigned representative also provided explanation of the claimed invention with respect to the Parisi and Mead references relied upon in rejecting claims 9-19. The discussed proposed amendments and arguments for overcoming the prior art are substantially reflected in this Amendment.

REMARKS

Claims 5-19 are pending. By this Amendment, claims 5, 9, and 14 are amended.

Objection to the Specification

The Specification has been objected to for not explicitly stating what structure, materials, and acts perform the function recited in the means-plus-function claim elements of claim 14. Applicant respectfully submits that the specification as filed includes a description of structure performing the function stated in those claim elements. Additionally, by this Amendment, the Specification has been amended to explicitly point out where at examples of the claimed means for performing the recited function have been described. Withdrawal of the objection to the Specification is respectfully requested.

Claim Rejections under 35 U.S.C. § 112

Claims 14-19 have been rejected under 35 U.S.C. § 112, first paragraph for containing subject matter not described in the Specification in such a way as to enable one skilled in the art to make and/or use the invention. These rejections are respectfully traversed.

With respect to claim 14, the Office Action asserted that there is no disclosure of a means for limiting motion of the plunger rod or a means for maintaining disengagement of the means for limiting motion. To the contrary, Applicant respectfully points out that the Specification, in the paragraph beginning on page 4, line 22, describes locking slider 29 that operates in conjunction with toothed rack 11 to provide an example of a means for limiting motion of plunger rod 7. These items are depicted in the figures. Applicant also respectfully points out that the scope of claim 14 includes equivalents of the embodiments described in the Specification.

With respect to claims 15-19, the Office Action asserted that there is no disclosure of a disengageable ratcheting mechanism as claimed. Claim 15 states “a disengageable ratcheting

mechanism partially housed in the syringe body, the disengageable ratcheting mechanism associated with the plunger rod and operable to limit movement of the plunger rod to a forward direction when engaged with the plunger rod.” Applicant respectfully points out that the Specification, beginning on page 3, line 31, through page 4, line 33, and the figures, describe in detail one example embodiment of the claimed disengageable ratcheting mechanism. In this example, locking device 27 (including locking slider 29 and toothed rack 11) operates in ratcheting fashion to limit movement of the plunger rod to a forward direction when locking slider 29 is engaged with toothed rack 11 located on the plunger rod. Locking slider 29 can be pressed down via pushbutton 30 to disengage locking slider 29 from toothed rack 11; thus, the example ratcheting mechanism described in the Specification is also disengageable. Applicant respectfully points out that the scope of claim 15 is not limited to the example embodiments described in the Specification.

Claims 5-8 have been rejected under 5 U.S.C. § 112, second paragraph for being indefinite. Namely, the Office Action asserts that claims 5-8 appear to recite that the locking slider is maintained in the released position by the actuator, which the Examiner is equating to the pushbutton 30. By this Amendment, claim 5 is clarified to resolve the cause for this rejection.

In view of the above, Applicant respectfully requests that the rejections to the claims under 35 U.S.C. § 112 be withdrawn.

Claim Rejections under 35 U.S.C. § 102

Claim 14 stands rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Pat. No. 3,504,673 to Parisi. This rejection is respectfully traversed.

The Parisi patent discusses a gun-type injector that operates with a ratcheting action by way of a toothed rack on the plunger rod having teeth with a driving face and a ratcheting face. The rack and rack driver are normally engaged due to the forces applied by the primary leaf

spring. Depressing operating lug 46 depresses spring 33, and ultimately breaks the driving connection between the teeth of the rack and rack driver. Applicant respectfully points out that operation of the operating lug 46 and the rest of the release mechanism to break the driving connection between the teeth of the rack and rack driver is momentary in nature. In other words, the driving connection remains broken only while the operating lug is pressed in. Thus, the leaf spring does not maintain the disengagement of the teeth of the rack and the rack driver. The Parisi patent therefore is not instructive of the function of maintaining the disengagement, as claimed in claim 14.

Claims 9-19 have been rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Pat. No. 2,316,095 to Mead. This rejection is also respectfully traversed. The Mead patent discloses an inverted U-shaped pawl 34 having a tooth 38 that engages the ratchet teeth 24 of piston rod 21. Helical spring 39 applies a biasing force to hold the tooth 38 in operative engagement with ratchet teeth 24.

With respect to independent claim 9, Mead is not instructive of any locking device which comprises a slider movable in a direction generally transverse to the plunger as claimed therein. Applicant respectfully submits that U-shaped Pawl 34 cannot fairly be regarded as a slider. The Mead patent is also not instructive of a locking protrusion situated on, and movable with the operating lever, the locking protrusion engageable with the slider for releaseably securing the slider in a position disengaged with the toothed rack, as claimed in claim 9.

With respect to independent claim 14, Mead is not instructive of any means for maintaining disengagement of the means for limiting motion of the plunger rod so as to permit free movement of the plunger rod without a need to maintain application of an external force for disengaging the means for limiting motion of the plunger rod, as claimed therein.

With respect to independent claim 15, Mead is not instructive of the locking mechanism being operable to retain the disengageable ratcheting mechanism in a disengaged state from the plunger rod to permit the plunger rod to move in a backward direction, as claimed therein.

For at least these reasons, a prima facie case for anticipation has not been made, and cannot be sustained for independent claims 9, 14, and 15. As each of dependent claims 10-13 and 16-19 further limits its respective base claim, these claims are also believed to be allowable. Withdrawal of the §102 rejections with respect to claims 9-19 is respectfully requested.

Allowable Subject Matter

Applicant notes with appreciation that claims 5-8 have been indicated as being allowable if rewritten or amended to overcome the § 112 rejection. In view of this Amendment amending claim 5 to resolve the cause for the § 112 rejection, claims 5-8 are believed to be in condition for allowance.

Conclusion

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested.

The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,



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